Date of Deposit: April 6, 2006

Attorney Docket No.: 33331-006

In the claims:

Please cancel claims 9-10, 12-17, 20, 22-23, 33, 37, 40-42, 45-46, 51, and 57-65, and amend claims 26-30, 32, 34, 38-39, 47, and 56 as follows. This listing of claims replaces all prior versions, and listings, of claims in the application.

- 1. (original) A composition OVT102 having an amino acid sequence as shown in SEQ ID NO: 1.
- 2. (original) A composition which is a protein having an amino acid sequence substantially identical to that of wild-type cyanovirin (CVN), and having an additional amino acid sequence Xn at the N-terminal wherein X is an amino acid residue other than cysteine, and n is an integer that is at least 1, wherein the protein has an increased therapeutic index compared to CVN.
- 3. (original) The composition according to claim 2, wherein the protein has increased antiviral activity compared to CVN.
- 4. (original) The composition according to claim 2, wherein the protein has decreased toxicity to an animal cell compared to CVN.
- 5. (original) The composition according to claim 2, wherein n is 1.
- 6. (original) The composition according to claim 2 (met-CVN), wherein X comprises at least one methionine residue.
- 7. (original) The composition according to claim 3, wherein the increase in antiviral activity of the protein compared to CVN is at least 10%.
- 8. (original) The composition according to claim 3, wherein the increase in antiviral activity of the protein is at least 20%.
- 9-10. (canceled)
- 11. (original) The composition according to claim 3, wherein the antiviral activity is reducing infectivity of an enveloped virus.
- 12-17. (canceled)
- 18. (original) The composition according to claim 11, wherein the virus is causative of a disease selected from the group of: influenza, AIDS, Herpes I, Herpes II, hepatitis, smallpox, chicken pox, severe acute respiratory syndrome (SARS), and Ebola.

Date of Deposit: April 6, 2006 Attorney Docket No.: 33331-006

19. (original) A composition comprising a protein having an amino acid sequence substantially identical to that of CVN (SEQ ID NO: 2) and having at least one additional N-terminal amino acid residue, wherein the protein has enhanced antiviral activity compared to CVN.

- 20. (canceled)
- 21. (original) The composition according to claim 19, wherein substantially identical to CVN is at least 70% identical.
- 22-23. (canceled)
- 24. (original) The composition according to claim 20, wherein the hydrophobic residue is selected from the group of methionine (M), isoleucine (1), leucine (L), histidine (H), tyrosine (Y), phenylalanine (F), and tryptophan (W).
- 25. (original) The composition according to claim 19, wherein the amino acid is serine or threonine.
- 26. (currently amended) The composition according to claim 2 of any of claims 1-25, in a pharmaceutically acceptable carrier.
- 27. (currently amended) The composition according to claim 2 of any of claims 1-25 in an effective dose.
- 28. (currently amended) A kit for anti-viral treatment comprising a composition according to claim 2 of any of claims 1 25, a container, and instructions for use.
- 29. (currently amended) A nucleic acid encoding the composition according to claim 2 of any of claims 1-25.
- 30. (currently amended) A nucleic acid encoding a gene for expressing a composition according to claim 2 any of claims 1-25 in a Gram-negative bacterium.
- 31. (currently amended) The nucleic acid according to claim 30, wherein the gene has codons optimized for expression in *Escherichia coli*.
- 32. (currently amended) A nucleic acid <u>according to claim 30</u> comprising a nucleotide sequence as shown in SEQ ID NO: 3.
- 33. (canceled)
- 34. (currently amended) A method for <u>preventing an unwanted viral infection or treating</u> a subject having an unwanted virus, the method comprising administering to the subject a dose of the composition according to claim 2 of any of claims 1-27.

Date of Deposit: April 6, 2006 Attorney Docket No.: 33331-006

35. (original) The method according to claim 34, wherein administering the dose is providing a topical medicament.

- 36. (original) The method according to claim 34, wherein administering the dose is providing a parenteral medicament.
- 37. (canceled)
- 38. (currently amended) A method for removing an unwanted virus from an inanimate object, the method comprising contacting a surface of the object with a composition according to claim 2 of any of claims 1-25.
- 39. (currently amended) An article of manufacture comprising the composition of claim 2 any of compositions 1-25 immobilized on a solid substrate.
- 40-42. (canceled)
- 43. (original) A method for removal of a virus from a bodily fluid, the method comprising contacting the fluid with the article of manufacture according to claim 39, wherein the virus remains associated with the article, and separating the article from the fluid, wherein the virus is removed from the fluid.
- 44. (original) The method according to claim 43, wherein the fluid is selected from the group consisting of: blood, serum, lymph, plasma, cerebrospinal fluid, semen, and amniotic fluid.
- 45-46. (canceled)
- 47. (currently amended) A cell carrying a vector with a nucleotide sequence according to claim 32 as shown in SEQ ID NO: 3.
- 48. (original) The cell according to claim 47 which is a bacterial cell.
- 49. (original) The cell according to claim 48, wherein the bacterial cell is a species of a genus selected from: *Escherichia*, *Bacillus*, *Lactobacillus*, *Sporolactobacillus*, and *Streptomyces*.
- 50. (original) A probiotic antiviral medicament for treatment of an epithelial surface of an animal for an unwanted virus, the medicament comprising the cell according to claim 49 which is a *Bacillus*, *Lactobacillus*, or a *Sporolactobacillus*.
- 51. (canceled)
- 52. (original) The medicament according to claim 50 in a pharmaceutically acceptable carrier or buffer.

Date of Deposit: April 6, 2006 Attorney Docket No.: 33331-006

53. (original) The medicament according to claim 50, wherein the cell is a stabilized spore preparation.

- 54. (original) The medicament according to claim 50, wherein the epithelial surface is a mucosal surface.
- 55. (original) The medicament according to claim 50, wherein the surface is selected from oral, nasal, rectal, vaginal, and penile epithelia.
- 56. (currently amended) A method of preventing or treating an animal epithelium for the presence of an unwanted virus, the method comprising administering a probiotic antiviral medicament comprising a lactic acid bacterium capable of expressing the composition according to claim 1 OVT-102 having an amino acid sequence as shown in SEQ ID-NO:

 1.

57-65. (canceled)